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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

ORIGINAL

In the Matter of:	)	
	)	
Amendment of Section 73.622	)	MM Docket No.
Digital Television	)	RM-
Table of Allotments	)	
(Sault Saint Marie, Michigan)	)	

RECEIVED
MAY 31 2001
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

PETITION FOR RULE MAKING

Scanlan Television, Inc. ("Scanlan"), licensee of Station WGTQ-TV, Channel 8, Sault Saint Marie, Michigan, hereby petitions to amend the Digital Television Table of Allotments, Section 73.622 of the Commission's Rules, to change the channel allotted to WGTQ-TV at Sault Saint Marie from Channel 56 to Channel 9.

As is shown in the attached Technical Exhibit (the "Technical Exhibit"), the proposed change complies with the Commission's Rules. If the proposed allotment is adopted, Scanlan will prosecute an application for a construction permit to construct a Digital Television facility on Channel 9 to provide service to Sault Saint Marie and upon the grant of such application, will promptly construct the proposed facility.

Accordingly, Scanlan respectfully requests that the Commission amend the DTV Table of Allotments to change the channel allotted to Sault Saint Marie, Michigan for WGTQ-DT from Channel 56 to Channel 9 at the location set forth in the Technical Exhibit.

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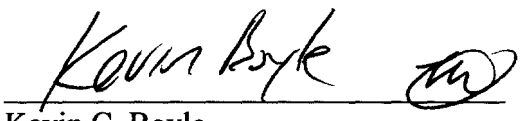
01-91

Respectfully Submitted,



Kevin C. Boyle
Latham & Watkins
555 Eleventh Street
Suite 1000
Washington, D.C. 20004

Counsel for Scanlan Television, Inc.

May 31, 2001

TECHNICAL EXHIBIT
PREPARED IN SUPPORT OF A
PETITION FOR RULE MAKING TO
MODIFY THE DTV ALLOTMENT TABLE
DTV STATION WGTQ-DT
SAULT STE MARIE, MICHIGAN

Technical Summary

This technical narrative and associated exhibits have been prepared on behalf of Scanlan Communications, Inc. in support of a Petition for Rule Making to modify the DTV allotment of station WGTQ-DT at Sault Ste. Marie, Michigan, from channel 56 to channel 9.

The Federal Communications Commission (FCC) assigned UHF channel 56 as WGTQ-TV's DTV allotment in the Memorandum, Opinion and Order (MO&O) concerning reconsideration of the 6th Report and Order in MM Docket No. 87-268.

The FCC assigned an ERP of 1000 kW-DA at an antenna radiation center height above average terrain (HAAT) of 290 meters. However, station WGTQ-DT proposes to use VHF channel 9 for its DTV facility.

Station WGTQ-DT wishes to operate on channel 9 for the following reasons. First, the use of channel 9 would allow for a substantially less transmitter power and smaller antenna to serve approximately the same coverage area as a comparable UHF DTV facility. This would reduce the applicants initial capital investment as well as overhead costs. Thus, the additional resources would be available for investment in DTV programming.

Secondly, the use of channel 9 would make it easier for current WGTQ-TV viewers to locate the DTV operation, as normal viewing is on the VHF band.

For the above reasons, the FCC is respectfully requested to change WGTQ-TV's DTV allotment from channel 56 to channel 9.

DTV channel 9 can be substituted and allotted to Sault Ste. Marie, Michigan in compliance with the principal community coverage requirements of Section 73.625(a) at reference coordinates Latitude 46°03'08", Longitude 84°06'38". In addition, operation on DTV channel 9 appears possible with a maximum directional effective radiated power (ERP) of up to 32 kW utilizing a Dielectric THB-C2-6H/12HD-1 directional antenna and an antenna height above average terrain (HAAT) of 291 meters. The proposed channel change is acceptable under the 2 percent criterion for *de minimis* impact applicable to DTV allotment modifications under Section 73.623(c)(2).

The proposed facilities (ERP 32 kW-DA/HAAT 291 meters) do not exceed the nominal maximum permitted pursuant to Section 73.622(f)(7)(i). Thus, it is proposed to modify the Sault Ste. Marie DTV allotment by specifying a DTV allotment on channel 9 with the following specifications:

State & City	DTV Channel	DTV ERP (kW)	Antenna HAAT (m)
MI, Sault Ste	9	32 (MAX-DA)	291

It is also proposed to amend the DTV Table of Allotments, Section 73.622(b) of the Commission's Rules, as follows:

	Channel No.	
City	Present	Proposed
Sault Ste. Marie, MI	56	9

It is proposed to allot DTV channel 9 at Latitude 46°03'08", Longitude 84°06'38". It is proposed to operate with an antenna radiation center height above mean sea level (RCAMSL) of 486.1 meters, an antenna radiation center height above average terrain of (HAAT) of 291 meters and a directional antenna maximum ERP of 32 kW.

Figure 1 is a sketch of antenna showing the location

of the proposed WGTQ-DT DTV antenna system. The FCC Tower Registration Number for the proposed tower is 1006719.

Figure 2 is a DTV channel 9 separation study toward other U.S. and Canadian NTSC and DTV allotments based on a 50 kilometer "buffer".

Figure 3 shows the horizontal and vertical relative field patterns for the proposed Dielectric THB-C2-6H/12HD-1 directional antenna.

Figure 4 provides a summary of interference and service for the proposed channel 9 allotment. Determination of interference and service was based on the procedures outlined in OET Bulletin No. 69 and criteria contained in Sections 73.622 and 73.623 of the FCC's rules. [1] It is noted that with respect to station WWTV(TV) on channel 9 at Cadillac, Michigan the following stations were used in the masking analysis:

WOOD-TV, Ch. 8(+), Grand Rapids, MI (316 kW-ERP)/(546 m-RCAMSL)
WGN-TV, Ch. 9(+), Chicago, IL (110 kW-ERP)/(595 m-RCAMSL)
WAOW-TV, Ch. 9(z), Wausau, WI (316 kW-ERP)/(760 m-RCAMSL)
CBET-TV, Ch. 9(-), Windsor, ON (325 kW-ERP)/(368 m-RCAMSL)
WILX-TV, Ch. 10(-), Onondaga, MI (316 kW-ERP)/(586 m-RCAMSL)

Results of the analysis, indicate that the proposed WGTQ-DT facility will cause unique interference to 14,136 persons within the WWTV(TV) service area. This amounts to 1.99% of the WWTV(TV) service population. Therefore, as shown in Figure 4, it is believed that the proposed channel 9 operation is in full compliance with the FCC's 2%/10% interference criteria. In

[1] The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 1 km was employed. An Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin No. 69.

addition, it is noted that the antenna center of radiation for Canadian station CBET-TV (**325 kW/368 m (RCAMSL)**) were obtained from the Canadian TV database and corroborated with the TV Fact Book. Therefore, it is respectfully requested that these facilities be used when station CBET-TV is included in the WWTV masking analysis.

Figure 5 is a map which depicts the 36 dBu and 43 dBu, noise limited contours for the proposed channel 9 DTV operation. As shown, all of Sault Ste. Marie is located within the 43 dBu contour. Therefore, the proposed channel 9 DTV allotment will comply with the city coverage requirements contained in Section 73.625(a).

Studies indicate the proposed DTV channel 9 operation will not adversely impact any co-channel or pertinent adjacent channel Class A LPTV stations.

US-Canadian TV Agreement Compliance

The proposed channel 9 operation will be located 11 kilometers from the closest point of the US-Canadian common border. Therefore, consideration must be given to the existing US-Canadian TV Agreement (1994) and Letter of Understanding (LOU) between the FCC and Industry Canada related to DTV service along the common border (September 12, 2000). Pursuant to the existing Agreement and LOU, DTV stations will be referred if the pertinent interfering contour would fall within the territory of the other country. The pertinent interfering contour applicable towards co-channel NTSC stations is the 22.2 dBu, F(50,10) contour. The pertinent interfering contour applicable towards co-channel DTV operations is the 13.5 dBu, F(10,10) contour. It was determined that both contours do overlap Canadian land area, and therefore it is believed necessary to refer the proposal to Canada.

As shown in the allocation study of Figure 2 the proposed WGTQ-DT site is short-spaced with respect to Canadian station CBLAT3 on NTSC channel 9 at Wawa, Ontario and also with

respect to Canadian station CKNCTV on channel 9 at Sudbury, Ontario. Figure 6 is a map depicting the 56 dBu F(50,50) protected contours for Canadian stations CBLAT3 and CKNC-TV. Also shown on Figure 6 is the 22.2 dBu F(50,10) interfering contour for the proposed WGTQ-DT operation. As can be seen in Figure 6, the WGTQ-DT interfering contour will only overlap the protected contour of station CBLAT3. Therefore, an interference study was prepared with respect to station CBLAT3 based on the Longley-Rice propagation model and procedures contained in the Letter of Understanding. Based on our study it is believed the proposed WGTQ-DT operation would not cause interference to any persons within the CBLAT3 service contour. Figure 7 is a copy of the computer printout showing the interference calculation to CBLAT3. Since no interference to Canadian viewers is predicted, it is respectfully requested that the proposal be given consideration based on use of the Longley-Rice propagation model.

Conclusion

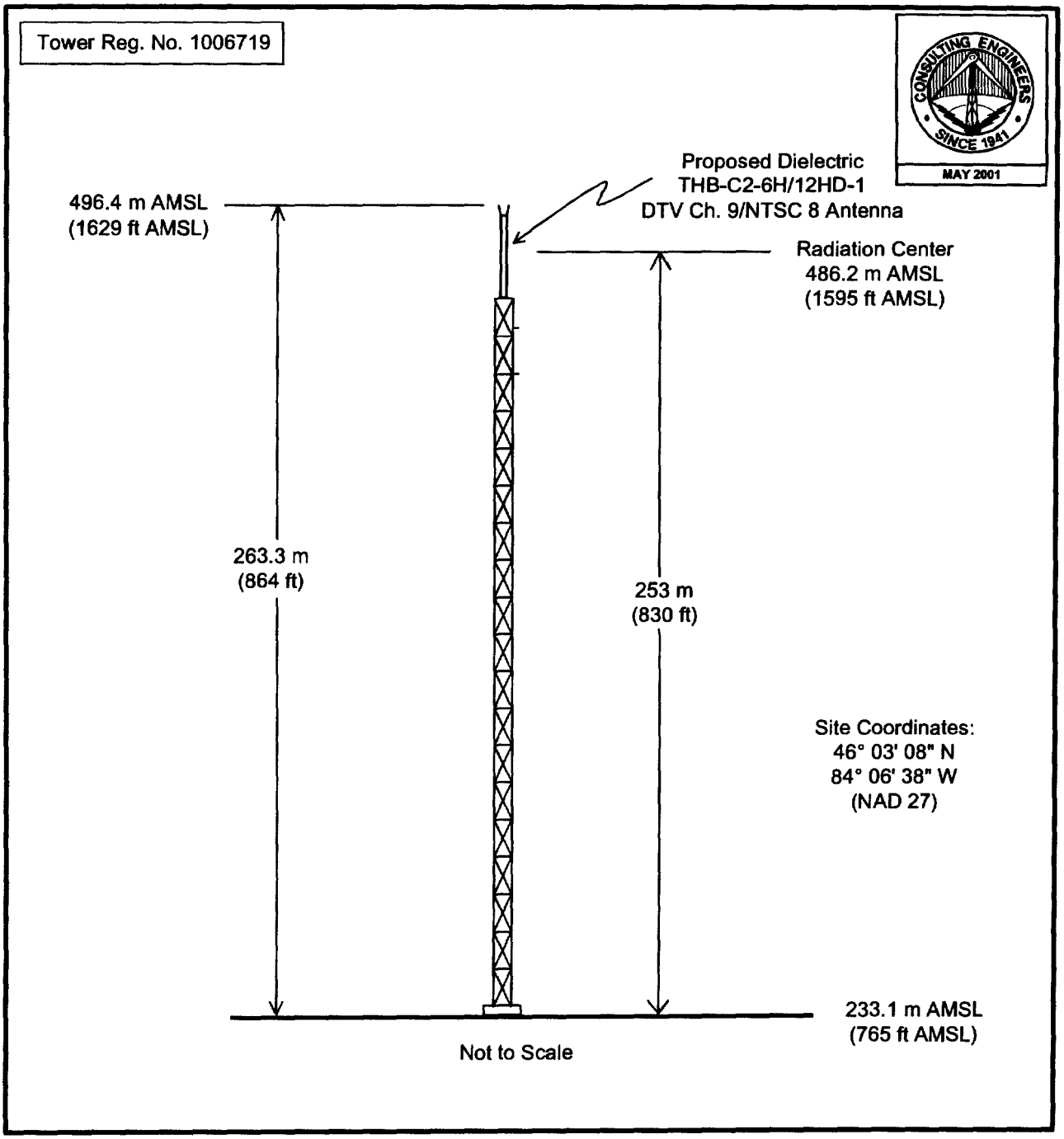
VHF DTV channel 9 can be substituted for the current DTV channel 56 allotment at Sault Ste. Marie, Michigan in compliance with the FCC's rules concerning DTV allotment changes.

Jerome J. Manarchuck

du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
(941) 329-6000
JERRY@DLR.COM

May 17, 2001

Figure 1



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

DTV STATION WGTQ-DT

SAULT STE MARIE, MICHIGAN

CH 9 32 KW (MAX-DA) 291 M

du Treil, Lundin & Rackley, Inc., Sarasota, Florida

Figure 2

TV/DTV Separation Study

Job Title :WGTQ-DT
Zone : 2
Channel 9 (186-192 MHz)

Separation Buffer 50 km
FCC TV DB Date : 05/04/01
Coordinates : 46-03-08 84-06-38

Call Status	City St FCC File No.	Channel Zone	ERP(kW) HAAT(m)	Latitude Longitude	Bear. True	Dist. (km)	Req. (km)
WGTQ	SAULT STE. MARIE	8(o)	316	46-03-06	214.7	0.09	11.0/125
LIC	MI BLCT -2617	II	290	84-06-40		10.91	CLOSE
CITO-T	CHAPLEAU	9( )	0.00	47-51-15	14.4	207.13	190.0
	ON	I		83-25-08		17.13	CLEAR
	CHAPLEAU	9(-)	0.00	47-51-15	14.4	207.14	167.0
ALLOC.	ON -	II	0	83-25-08		40.14	CLEAR
CBLAT3	WAWA	9(+)	32	48-01-13	347.7	224.12	283.0
LIC	ON -	II	187	84-45-00		-58.88	SHORT[1]
WWTV	CADILLAC	9(0)	316	44-08-12	204.9	233.94	273.6
LIC	MI BMLCT -251	II	497	85-20-33		-39.66	SHORT[2]
CKNCTV	SUDBURY	9(+)	293	46-30-40	76.8	243.36	283.0
LIC	ON -	II	190	81-00-24		-39.64	SHORT[1]
WWUP-T	SAULT STE. MARIE	10(+)	316	46-03-49	27.0	1.43	11.0/125
LIC	MI BLCT -19870331	II	370	84-06-08		9.57	CLOSE

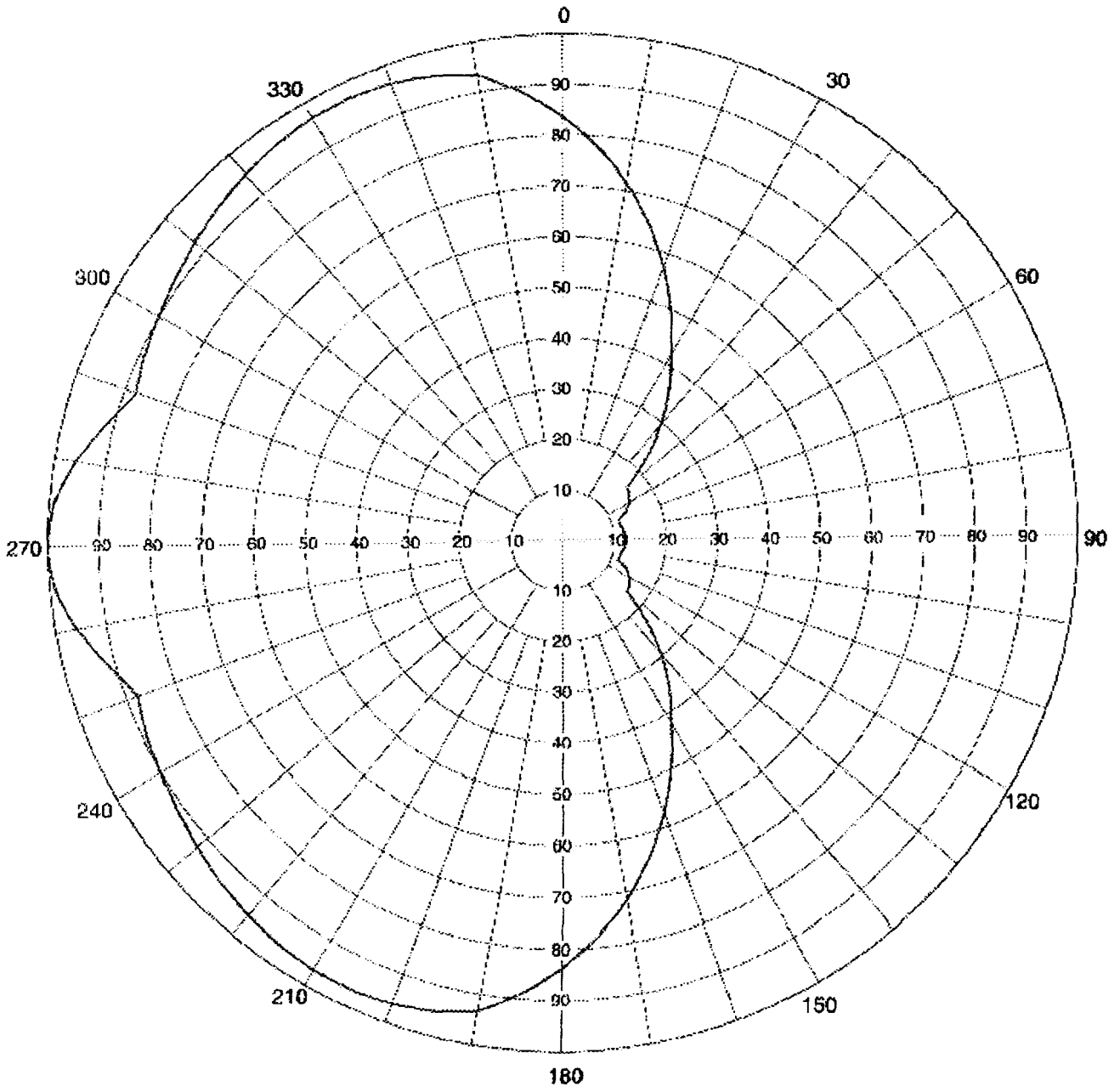
1 Protection provided using U.S./Canada LOU.
2 Protection provided using OET-69 methods, see Figure 4.

Dielectric

Date	10 May 2001		
Call Letters	WGTQ-DT	Channel	
Location	Sault Ste. Marie, MI		
Customer			
Antenna Type	THB-6-1		

AZIMUTH PATTERN

RMS Gain at Main Lobe	1.92 (2.83 dB)	Frequency	MHz
Calculated / Measured	Calculated	Drawing #	THB-C2-9



Remarks:

Dielectric

Date 10 May 2001
Call Letters WGTQ-DT Channel
Location Sault Ste Marie, MI
Customer
Antenna Type THB-6-1

TABULATION OF AZIMUTH PATTERN

Azimuth Pattern Drawing # THB-C2-9

Angle	Field	ERP (kW)	ERP (dBk)
0	0.837	22.4	13.51
10	0.716	16.4	12.15
20	0.573	10.5	10.21
30	0.420	5.6	7.52
40	0.295	2.8	4.45
50	0.162	0.8	-0.76
60	0.148	0.7	-1.54
70	0.114	0.4	-3.81
80	0.119	0.5	-3.44
90	0.122	0.5	-3.22
100	0.119	0.5	-3.44
110	0.114	0.4	-3.81
120	0.148	0.7	-1.54
130	0.162	0.8	-0.76
140	0.295	2.8	4.45
150	0.420	5.6	7.52
160	0.573	10.5	10.21
170	0.716	16.4	12.15
180	0.837	22.4	13.51
190	0.934	27.9	14.46
200	0.962	29.6	14.72
210	0.967	29.9	14.76
220	0.951	28.9	14.62
230	0.927	27.5	14.39
240	0.902	26.0	14.16
250	0.877	24.6	13.91
260	0.958	29.4	14.68
270	1.000	32.0	15.05
280	0.958	29.4	14.68
290	0.877	24.6	13.91
300	0.902	26.0	14.16
310	0.927	27.5	14.39
320	0.951	28.9	14.62
330	0.967	29.9	14.76
340	0.962	29.6	14.72
350	0.934	27.9	14.46

Maxima

Angle	Field	ERP (kW)	ERP (dBk)
90	0.122	0.5	-3.22
205	0.968	30.0	14.77
210	0.967	29.9	14.76
270	1.000	32.0	15.05
330	0.967	29.9	14.76
335	0.968	30.0	14.77

Minima

Angle	Field	ERP (kW)	ERP (dBk)
70	0.114	0.4	-3.81
110	0.114	0.4	-3.81
209	0.967	29.9	14.76
250	0.877	24.6	13.91
290	0.877	24.6	13.91
331	0.967	29.9	14.76

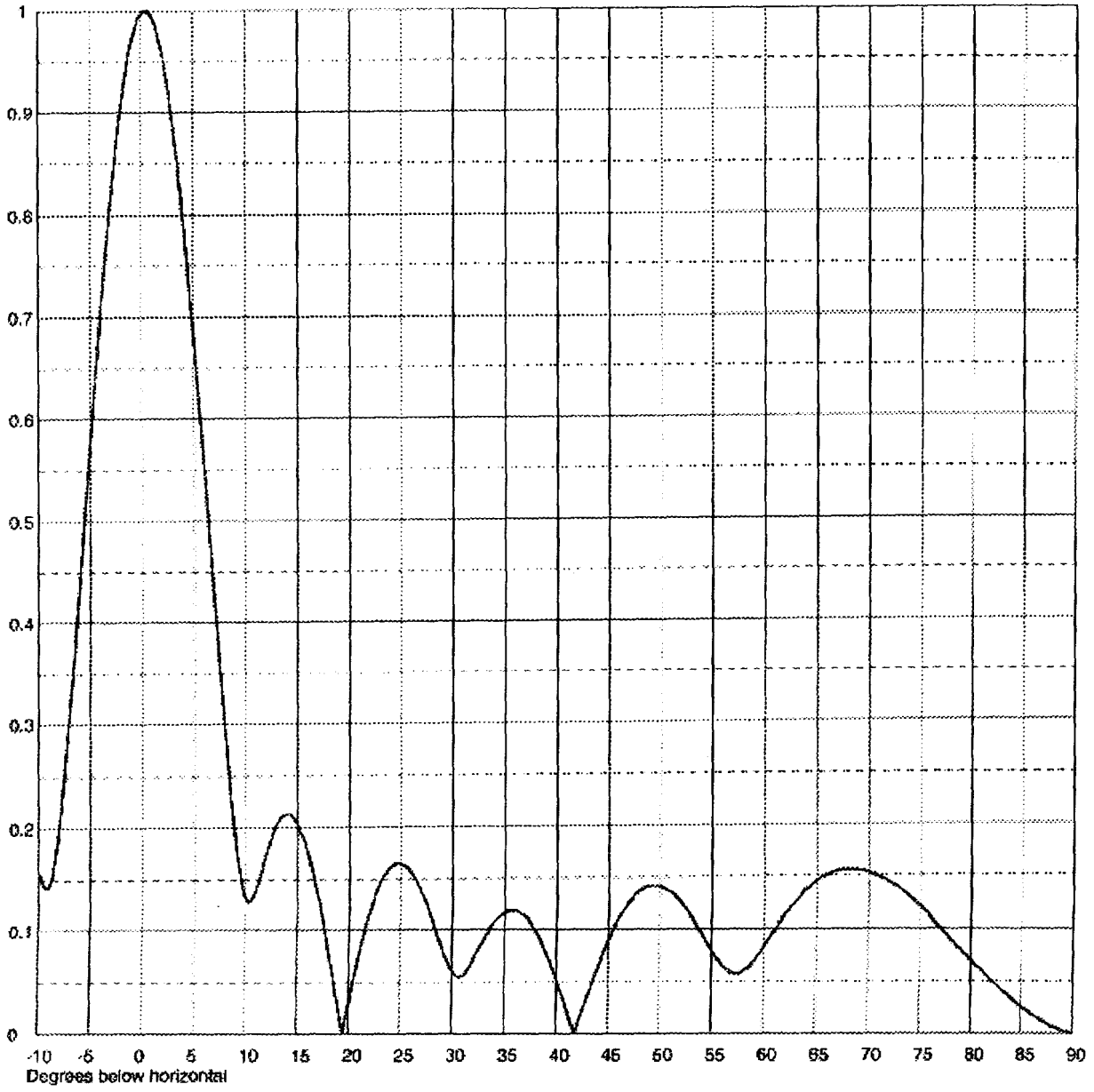
Remarks:

Dielectric

Date	10 May 2001		
Call Letters	WGTQ-DT	Channel	9
Location	Sault Ste. Marie, MI		
Customer			
Antenna Type	THB-C2-6/12-1		

ELEVATION PATTERN

RMS Gain at Main Lobe	6.0 (7.78 dB)	Beam Tilt	0.60 Degrees
RMS Gain at Horizontal	6.0 (7.78 dB)	Frequency	189.00 MHz
Calculated / Measured	Calculated	Drawing #	06H060060-90



Remarks:

Dielectric

Date 10 May 2001
Call Letters WGTQ-DT Channel 9
Location Sault Ste. Marie, MI
Customer
Antenna Type THB-C2-6/12-1

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing # 06H060060-90

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.161	2.4	0.933	10.6	0.130	30.5	0.056	51.0	0.135	71.5	0.146
-9.5	0.145	2.8	0.919	10.8	0.134	31.0	0.057	51.5	0.130	72.0	0.143
-9.0	0.144	2.8	0.904	11.0	0.140	31.5	0.062	52.0	0.125	72.5	0.140
-8.5	0.163	3.0	0.888	11.5	0.157	32.0	0.071	52.5	0.118	73.0	0.136
-8.0	0.201	3.2	0.871	12.0	0.176	32.5	0.081	53.0	0.111	73.5	0.132
-7.5	0.251	3.4	0.853	12.5	0.192	33.0	0.090	53.5	0.104	74.0	0.128
-7.0	0.309	3.6	0.834	13.0	0.204	33.5	0.099	54.0	0.096	74.5	0.124
-6.5	0.372	3.8	0.814	13.5	0.211	34.0	0.107	54.5	0.088	75.0	0.120
-6.0	0.438	4.0	0.794	14.0	0.213	34.5	0.112	55.0	0.080	75.5	0.115
-5.5	0.505	4.2	0.772	14.5	0.210	35.0	0.116	55.5	0.073	76.0	0.110
-5.0	0.572	4.4	0.750	15.0	0.203	35.5	0.118	56.0	0.066	76.5	0.105
-4.5	0.637	4.6	0.727	15.5	0.191	36.0	0.118	56.5	0.061	77.0	0.100
-4.0	0.700	4.8	0.703	16.0	0.174	36.5	0.116	57.0	0.058	77.5	0.095
-3.5	0.759	5.0	0.679	16.5	0.155	37.0	0.112	57.5	0.058	78.0	0.090
-3.0	0.813	5.2	0.654	17.0	0.132	37.5	0.106	58.0	0.060	78.5	0.085
-2.8	0.833	5.4	0.629	17.5	0.108	38.0	0.098	58.5	0.063	79.0	0.080
-2.6	0.852	5.6	0.603	18.0	0.081	38.5	0.089	59.0	0.069	79.5	0.075
-2.4	0.871	5.8	0.577	18.5	0.054	39.0	0.078	59.5	0.075	80.0	0.070
-2.2	0.888	6.0	0.551	19.0	0.026	39.5	0.066	60.0	0.082	80.5	0.065
-2.0	0.904	6.2	0.525	19.5	0.002	40.0	0.053	60.5	0.090	81.0	0.061
-1.8	0.919	6.4	0.498	20.0	0.028	40.5	0.039	61.0	0.097	81.5	0.056
-1.6	0.933	6.6	0.472	20.5	0.054	41.0	0.024	61.5	0.105	82.0	0.051
-1.4	0.945	6.8	0.446	21.0	0.077	41.5	0.009	62.0	0.112	82.5	0.047
-1.2	0.957	7.0	0.419	21.5	0.098	42.0	0.006	62.5	0.118	83.0	0.042
-1.0	0.967	7.2	0.394	22.0	0.117	42.5	0.021	63.0	0.125	83.5	0.038
-0.8	0.975	7.4	0.368	22.5	0.133	43.0	0.036	63.5	0.130	84.0	0.034
-0.6	0.983	7.6	0.343	23.0	0.146	43.5	0.050	64.0	0.136	84.5	0.029
-0.4	0.989	7.8	0.318	23.5	0.155	44.0	0.064	64.5	0.140	85.0	0.026
-0.2	0.994	8.0	0.294	24.0	0.161	44.5	0.077	65.0	0.144	85.5	0.022
0.0	0.997	8.2	0.271	24.5	0.164	45.0	0.089	65.5	0.148	86.0	0.018
0.2	0.999	8.4	0.249	25.0	0.164	45.5	0.100	66.0	0.151	86.5	0.015
0.4	1.000	8.6	0.228	25.5	0.161	46.0	0.110	66.5	0.153	87.0	0.012
0.6	0.999	8.8	0.208	26.0	0.155	46.5	0.118	67.0	0.154	87.5	0.009
0.8	0.997	9.0	0.190	26.5	0.147	47.0	0.126	67.5	0.156	88.0	0.006
1.0	0.994	9.2	0.173	27.0	0.136	47.5	0.132	68.0	0.156	88.5	0.004
1.2	0.989	9.4	0.159	27.5	0.124	48.0	0.136	68.5	0.156	89.0	0.002
1.4	0.983	9.6	0.147	28.0	0.111	48.5	0.139	69.0	0.156	89.5	0.001
1.6	0.975	9.8	0.138	28.5	0.096	49.0	0.141	69.5	0.155	90.0	0.000
1.8	0.967	10.0	0.132	29.0	0.083	49.5	0.141	70.0	0.153		
2.0	0.957	10.2	0.128	29.5	0.070	50.0	0.140	70.5	0.151		
2.2	0.945	10.4	0.128	30.0	0.061	50.5	0.138	71.0	0.149		

Remarks:

Figure 4

TECHNICAL EXHIBIT
PREPARED IN SUPPORT OF
PETITION FOR RULE MAKING TO
MODIFY THE NTSC ALLOTMENT TABLE
MOBILE, ALABAMA

Interference and Service Summary

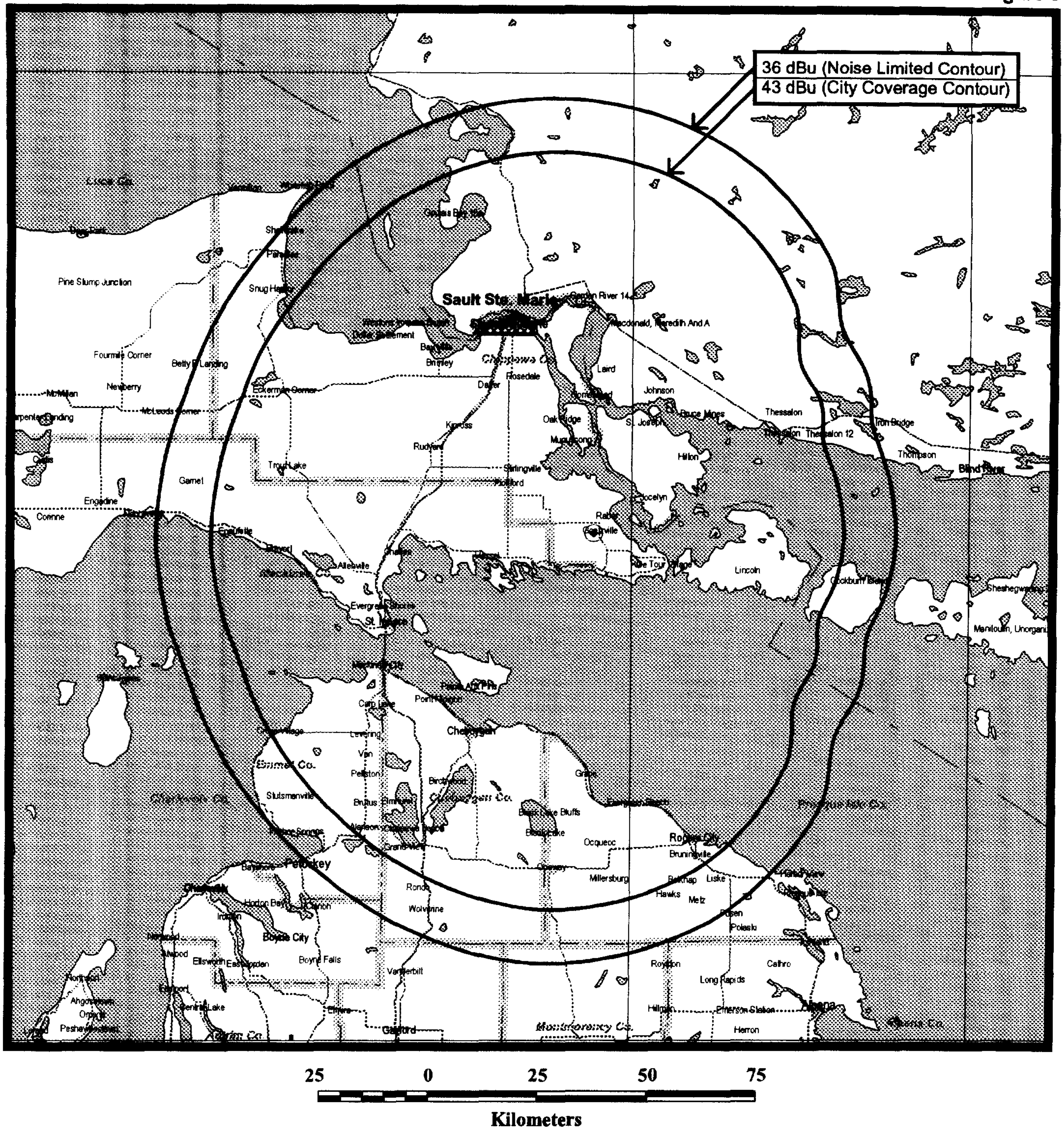
I. Interference Caused

Protected Station	FCC Service Population	Unique Interference Population
WWTV, NTSC Ch. 9 Cadillac, MI	708,658	14,136 (1.99%)
CBLAT3, NTSC Ch. 9 Wawa, ON	6,541	0 (0.00%)
CKNCTV, NTSC Ch. 9 Wawa, ON	185,610	0 (0.00%)

II. Service

	Population within
Within Noise-Limited Contour	94,239
Not Affected by Terrain Losses	89,730
Lost to NTSC Interference	2,775
Lost to DTV Interference	0
Total Service	86,955

Figure 5

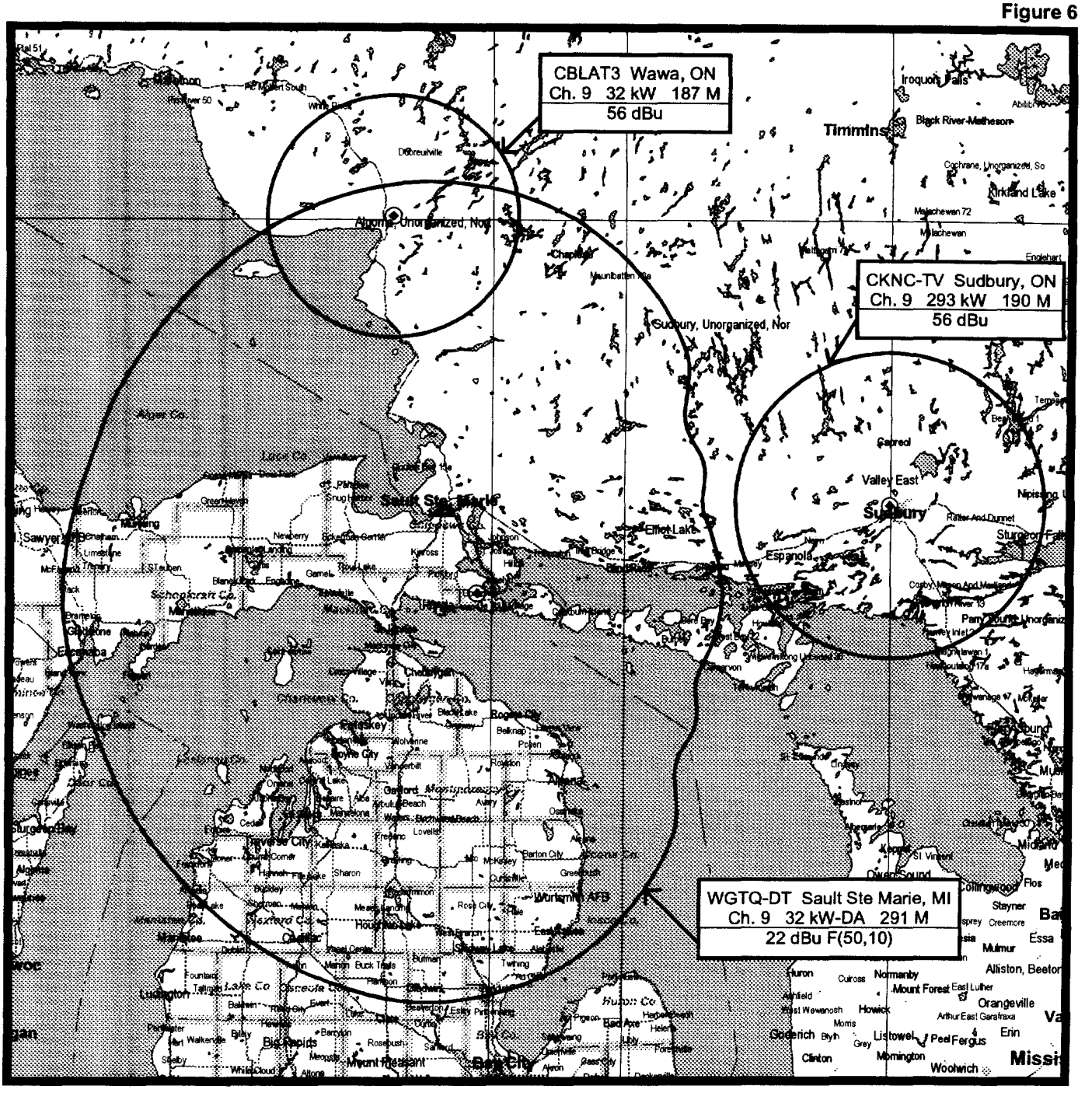


PREDICTED COVERAGE CONTOURS

DTV STATION WGTQ-DT
SAULT STE MARIE, MICHIGAN
CH 9 32 KW (MAX-DA) 291 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 6



CANADIAN ALLOCTION STUDY MAP

DTV STATION WGTQ-DT
SAULT STE MARIE, MICHIGAN
CH 9 32 KW (MAX-DA) 291 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

FIGURE 7

```
Study Date: 20010514
Study Start: 13:22:02
INTERFERENCE CAUSED TO CANADIAN ASSIGNMENT FROM PROPOSED WGTQ-DT
CELL SIZE : 2.0 km
Using DTV->DTV service params
Using circles for service area


*****************************
  CBLAT-3  48-01-13 084-45-00   9(0)  325.0 kW   489.7 m AMSL  50.0 % 56.0 dBu
WAWA                 ON
CANTAB                  CLASS VU
Calculated RCAMSL with HAAT of          150
                                      Area              Pop
within Noise Limited Contou      21137.80             6541
%loc = 50   %time = 50
not affected by terrain losses   15087.51             5514
*************
  WGTQ-DT  46-03-08   084-06-38   9(N)  32.0 kW-DA   486.1 m AMSL   10.0 % 33.0
SAULT STE MARIE      MI
PROPOSED DTV                  CLASS EX
1.00  0.96  0.88  0.90  0.93  0.95  0.97  0.96  0.93  0.84  0.71  0.57
0.42  0.29  0.16  0.15  0.11  0.12  0.12  0.12  0.11  0.15  0.16  0.29
0.42  0.57  0.71  0.84  0.93  0.96  0.97  0.95  0.93  0.90  0.88  0.96
Ref Az: 270.0

D/U Baseline:    33.80000
%loc = 50   %time = 10
                                      Area              Pop
Interference                          422.11              0  (0.0%)

Study end time: 13:22:55
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